

Film leak detector

What is claimed is

Patent Claims

1. Film leak detector with two films (5, 6) each stretched in a frame (3, 4), characterized in that each of the frames (3, 4) comprises two synthetic material subframes (71, 73 or 72, 74, respectively) between which the particular film (5, 6) is fastened.
2. Leak detector as claimed in claim 1, characterized in that the films (5, 6) are adhered or screw-connected all-over with the frame areas adjacent to them.
3. Leak detector as claimed in claim 1 or 2, characterized in that each of the frames (3, 4) comprises an outer (71, 72) and an inner subframe (73, 74) and that the particular outer subframe (71, 72) is equipped with a recess (75, 76) in which is disposed the particular inner subframe (73, 74).  
*Subj A-1*
4. Leak detector as claimed in claim 3, characterized in that the recesses (75, 76) corresponding to one another are disposed in the regions of the outer subframes facing away from the test chamber (80) and that one of the inner subframes disposed in the recesses is equipped with a seal, preferably a lip seal (77).  
*Subj A-1*
5. Leak detector as claimed in one of claims 1 to 4, characterized in that the lower frame (4) is stayed on the margin (7) of a plate-form bottom (8).

*Sub A*

6. Leak detector as claimed in one of claims 1 to 5, characterized in that as a support of the upper frame (3) is provided a steel profile (81) encompassing the frame.

7. Leak detector as claimed in claim 6, characterized in that the steel profile (81) is developed angularly and at least partially encompasses the frame (3) from above and from the outside.

8. Leak detector as claimed in claim 6, or 7, characterized in that the upper frame (3) is fastened on the steel profile (81) so as to float.

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9. Leak detector as claimed in claim 6, 7 or 8, characterized in that the steel profile (81) with the test chamber (80) closed also partially encompasses the lower frame (4).

*Sub A*

10. Leak detector as claimed in one of the preceding claims, characterized in that the frames (3, 4) and the steel profile (81) are formed circularly.

11. Leak detector as claimed in one of the preceding claims, characterized in that the frames (3, 4) are comprised of synthetic material, preferably polyamide.

12. Leak detector as claimed in one of the preceding claims, characterized in that it is equipped with a sniffer (48) which can be deposited in a holder (54).

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13. Leak detector as claimed in claim 12, characterized in that it is equipped with a support (82) for the holder (54) of the sniffer (48).

*Subj 14*

14. Leak detector as claimed in one of the preceding claims, characterized in that the film (6) of the lower frame (4) is equipped with a central connection port (18) and that the line (19) is detachably connected with the connection port (18).

15. Leak detector as claimed in claim 14, characterized in that the connection port (18) is a tube section comprised of synthetic material.

16. Leak detector as claimed in claim 15, characterized in that the line (19) in the region facing the connection port (18) is developed as a synthetic corrugated tube which encompasses the connection port (18) when the connection is established.

17. Leak detector as claimed in claim 16, characterized in that between the corrugated tube and the connection port at least one sealing ring (83, 84) is disposed.

18. Leak detector as claimed in one of claims 15 to 18, characterized in that the synthetic material tube section (18) and/or corrugated tube (19) are comprised of polyamide.

19. Leak detector as claimed in one of the preceding claims, characterized in that the frames (3, 4) are connected with one another across an articulation (2).

20. Leak detector as claimed in claim 19, characterized in that the two frames (3, 4) are under the effect of a spring device whose force acts continuously in the direction of opening.

*Add B5*